

.....1900.....

SAVAGE ARMS COMPANY

MANUFACTURERS OF

HIGH-GRADE, HAMMERLESS

Military, Sporting Rifles and Carbines

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T. E. PROCTOR, Vice-President.
WALTER JEROME GREEN, Secretary and
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METALLIC AMMUNITION

SMOKELESS POWDER

METAL COVERED BULLETS

RE-LOADING TOOLS AND SIGHTS

UTICA, NEW YORK, U. S. AMERICA.

TERMS OF SALE.

1. Terms are net cash.
2. No discount from list prices, except to dealers in actual trade. Special terms for large contracts.
3. Discounts to dealers in actual trade given only on application.
4. Remittances must be made by money order, cash by express or in New York funds or their equivalent.
5. Shipments C. O. D. to parties not known to us will be made only on receipt of not less than 25 per cent. of the value of shipment. The extra charges for making the collection of the balance must be borne by the party giving the order.
6. Goods are never sent on approval. Prices subject to change without notice.
7. Mail orders from unknown parties must be accompanied with cash or reliable references.

SHIPPING INSTRUCTIONS.

1. Re-loading tools, sights, and parts not exceeding four pounds in weight can be sent by mail to all parts of the United States at a prepaid expense of one cent for each ounce in weight.
2. Loaded cartridges, primed shells, powder or primers can not be sent by mail.
3. All goods sent to us must be plainly marked with the name and address of the party sending the same, and all express or other charges prepaid.
4. All goods securely packed for shipment. Our responsibility ceases on receiving a bill of lading.
5. Claims for errors must be made immediately upon receipt of goods.
6. Freight or express charges must be paid by purchasers.
7. Give Post Office address with name of State and County.

Savage Rifle, Model 1899.



Round Barrel Rifle,	\$20.00
Grade A Engraving,	5.00
Checking,	5.00

The engraving is carefully executed scroll work on both sides and top of the receiver, and also lines following the contour of the receiver.

Any kind of barrel and stocks can be had with this grade.

Savage Rifle, Model 1899.



Round Barrel Rifle,	.	.	.	.	.	.	.	.	.	.	\$20.00
Grade B Engraving,	.	.	.	.	.	.	.	.	.	.	10.00
Checking,	.	.	.	.	.	.	.	.	.	.	5.00

A deer or other animal is engraved on both sides of the receiver with scroll work, with relieving lines on the receiver. This grade can be had with any kind of barrel and stocks desired.

Savage Rifle, Model 1899.



Octagon Barrel Rifle,	.	.	.	.	\$21.50
Grade C Engraving,	.	.	.	.	20.00
Checking, . . . .	.	.	.	.	5.00

This engraving is very handsome, both sides of the receiver being covered with scroll work and animal scenes. This engraving can be had with any kind of barrel and stocks desired.

Savage Rifle, Model 1899.



Octagon Barrel Rifle,	.	.	.	.	\$21.50
Grade D Engraving,	.	.	.	.	30.00
Fancy English Walnut Stocks and Fore-arm, Checked,	.	.	.	.	15.00

The other side of the receiver shows different but equally rich engraving. This grade of engraving can be had with any kind of barrel or stocks desired.

Savage Rifle, Model 1899.



Round Barrel Rifle,	.	.	.	.	\$20.00
Grade E Engraving,	.	.	.	.	40.00
Savage Combination Rear Sight,	.	.	.	.	3.00
Checking,	.	.	.	.	8.00

The engraving is very elaborate. Fine animal scenes on both sides of the receiver. This rifle presents a remarkably rich appearance. It can be had with any kind of barrel and stocks desired.

Savage Rifle, Model 1899.



Octagon Barrel Rifle,	.	.	.	.	\$21.50
Grade F Engraving,	.	.	.	.	50.00

The entire receiver on this gun is engraved. The engraving on the other side consists of a landscape and deer. All engraving is very fine and elaborate.

This grade can be had with any kind of barrel or stocks desired.

Savage Rifle, Model 1899.



Octagon Barrel Rifle,	.	.	.	.	.	.	.	.	.	\$21.50
Grade G Engraving,	.	.	.	.	.	.	.	.	.	130.00
Carved Stocks,	.	.	.	.	.	.	.	.	.	50.00
Extra Fancy Circassian Walnut Stocks and Fore-arm, checked,	.	.	.	.	.	.	.	.	.	20.00

This rifle is very elaborately engraved, and of the finest workmanship, in a manner impossible to reproduce in a cut, to do the work justice. The stocks are handsomely carved. The wood selected for this grade is the very finest Circassian Walnut. All parts of the mechanism are specially finished. The rifle can be had with any kind of barrel desired.

Savage Rifle, Model 1899.



PISTOL GRIP.

SAVAGE RIFLE, Octagon Barrel, Model 1899.

Weight,	8 lbs. 3 oz.	Number of Cartridges,	4
	Rifle Butt Plate,	Caliber,	Steel
Length of the pistol grip stock,	11 in.	Checking, A grade,	\$7.00
	Checking, B grade (as on page 6),		

Savage Magazine Rifle

As a Take Down.

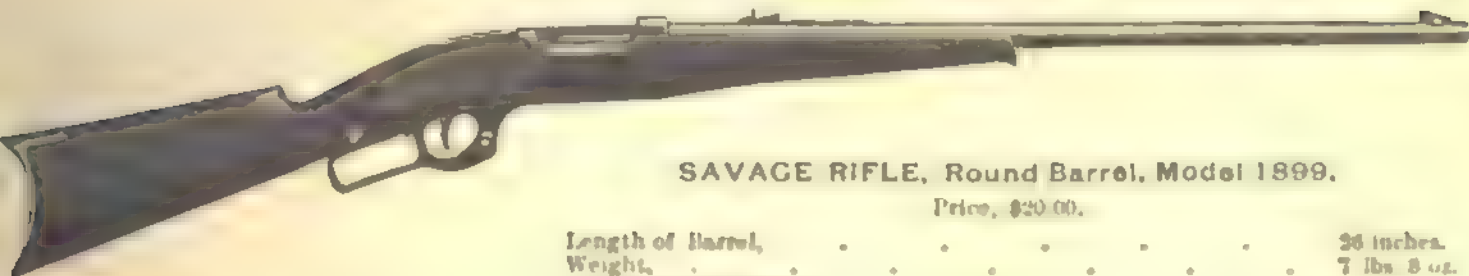


Now, the magazine pressure of the stock, when it has been forced, is not able to open out the barrel from the receiver. The barrel is held in place by the magazine pressure.

Like the other Savage rifles, this rifle is made in two pieces, the receiver and the stock.

By moving the receiver back, the SAVAGE rifle becomes a pocket rifle. The receiver is 12 inches long, inside measurement. The stock is 11 inches long, inside measurement. The receiver is 11 inches long, inside measurement. The stock is 11 inches long, inside measurement. By moving the receiver back, the rifle becomes a pocket rifle.

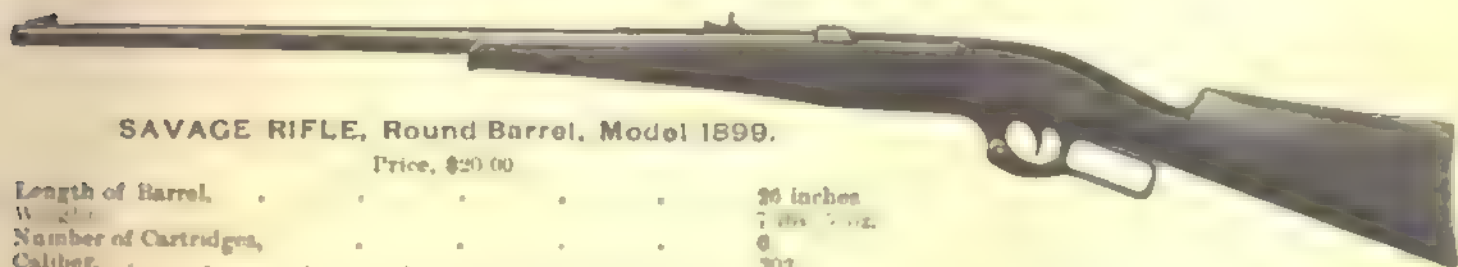
Savage Hammerless Sporting Rifle.



SAVAGE RIFLE, Round Barrel, Model 1899.

Price, \$20.00.

Length of Barrel,	.	.	.	.	.	.	26 inches.
Weight,	.	.	.	.	.	.	7 lbs 8 oz.
Number of Cartridges,	.	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.	.303.
Rifle Butt Plate,	.	.	.	.	.	.	Steel



SAVAGE RIFLE, Round Barrel, Model 1899.

Price, \$20.00

Length of Barrel,	.	.	.	.	.	.	26 inches
Weight,	.	.	.	.	.	.	7 lbs 8 oz.
Number of Cartridges,	.	.	.	.	.	.	6
Caliber,	.	.	.	.	.	.	.303.
Shot-gun Butt Plate,	.	.	.	.	.	.	Steel

SAVAGE rifles can also be furnished to take the 5000 smokeless cartridges if so ordered



SAVAGE RIFLE, Half Octagon Barrel, Model 1899.

Price, \$21.50.

Length of Barrel,	.	.	.	.	.	26 inches.
Weight,	.	.	.	.	.	7 lbs. 12 oz.
Number of Cartridges,	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.303.
Rifle Butt Plate,	.	.	.	.	.	Steel.



SAVAGE RIFLE, Half Octagon Barrel, Model 1899.

Price, \$21.50.

Length of Barrel,	.	.	.	.	.	26 inches.
Weight,	.	.	.	.	.	7 lbs. 8 oz.
Number of Cartridges,	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.303.
Shot-gun Butt Plate,	.	.	.	.	.	Steel.

SAVAGE rifles can also be furnished to take the .20.50 smokeless cartridges, if so ordered.



SAVAGE RIFLE, Full Octagon Barrel, Model 1899.

Price \$21.50.

Length of Barrel,	.	.	.	.	.	.	26 inches
Weight,	.	.	.	.	.	.	8 lbs.
Number of Cartridges,	.	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.	.303.
Rifle Butt Plate,	.	.	.	.	.	.	Steel.

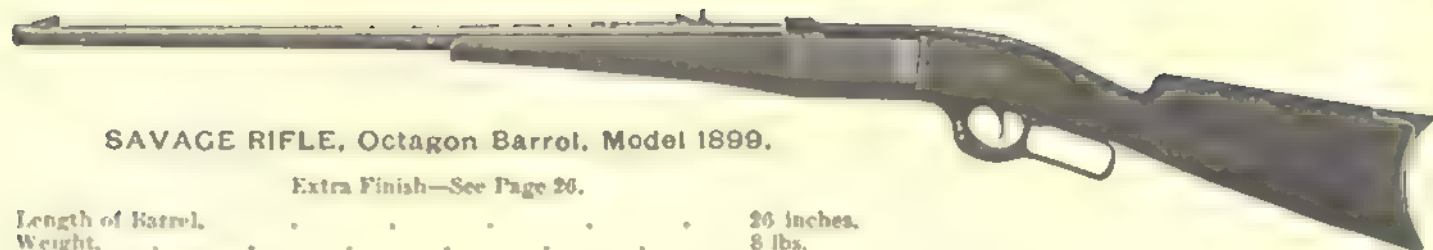


SAVAGE RIFLE, Full Octagon Barrel, Model 1899.

Price, \$21.50

Length of Barrel,	.	.	.	.	.	26 inches.
Weight,	.	.	.	.	.	7 lbs. 12 oz.
Number of Cartridges,	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.303.
Shot-gun Butt Plate,	.	.	.	.	.	Steel.

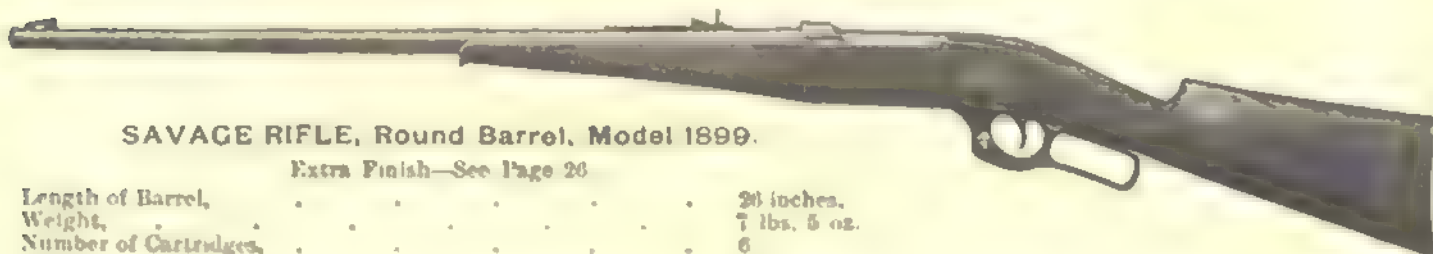
SAVAGE rifles can also be furnished to take the 30-30 smokeless cartridges, if so ordered.



SAVAGE RIFLE, Octagon Barrel, Model 1899.

Extra Finish—See Page 26.

Length of Barrel,	.	.	.	.	.	.	26 inches.
Weight,	.	.	.	.	.	.	8 lbs.
Number of Cartridges,	.	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.	.303.
Rifle Butt Plate,	.	.	.	.	.	.	Steel.



SAVAGE RIFLE, Round Barrel, Model 1899.

Extra Finish—See Page 26

Length of Barrel,	.	.	.	.	.	.	26 inches.
Weight,	.	.	.	.	.	.	7 lbs. 5 oz.
Number of Cartridges,	.	.	.	.	.	.	6
Caliber,	.	.	.	.	.	.	.303
Shot-gun Butt Plate,	.	.	.	.	.	.	Steel

Fancy Stocks, Checked, Engraved. For Prices, see page 24.

SAVAGE rifles can also be furnished to take the 30-30 smokeless cartridges, if so ordered.



ANGULAR BAYONET.

SWORD BAYONET.

SAVAGE REPEATING HAMMERLESS MILITARY RIFLE.

Prices on application

Length of Barrel,	.	.	.	.	.	.	28 inches.
Weight,	.	.	.	.	.	.	84 lbs.
Number of Cartridges,	.	.	.	.	.	.	8
Caliber,	.	.	.	.	.	.	.303.

SAVAGE CARBINE, Model 1899.

Price, \$20.00

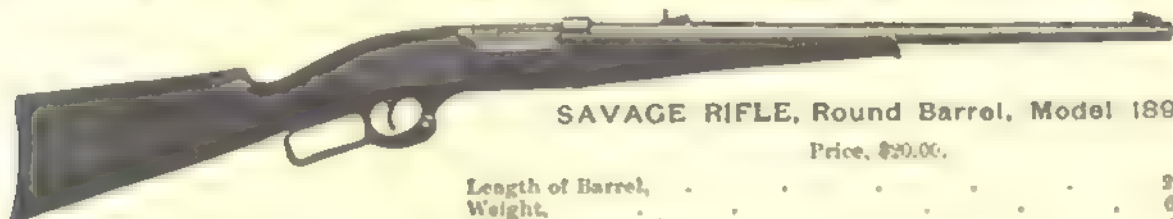
Length of Barrel,	.	.	.	.	20 inches.
Weight,	.	.	.	.	74 lbs.
Number of Cartridges,	.	.	.	.	6.
Caliber,	.	.	.	.	.303

SAVAGE rifles can also be furnished to take the 6.35 smokeless cartridges if so ordered



TOP VIEW OF SAVAGE SPORTING RIFLE.

The compact magazine system of the Savage rifle gives the arm a remarkably neat appearance, so that it is generally taken to be a single shot rifle only, no outward sign of a magazine is apparent.



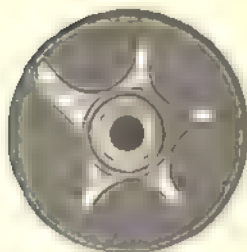
SAVAGE RIFLE, Round Barrel, Model 1899.

Price, \$20.00.

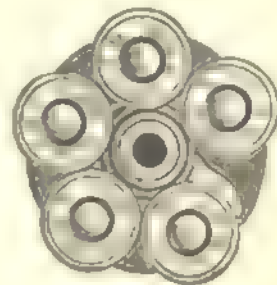
Length of Barrel,	.	.	.	.	.	.	.	22 inches
Weight,	.	.	.	.	.	.	.	6 lbs. 14 oz.
Number of Cartridges,	.	.	.	.	.	.	.	6.
Caliber,	.	.	.	.	.	.	.	.303
Shot-gun Butt Plate,	.	.	.	.	.	.	.	Steel.

Rear View of Magazine.

Showing position of cartridges in magazine.



EMPTY.



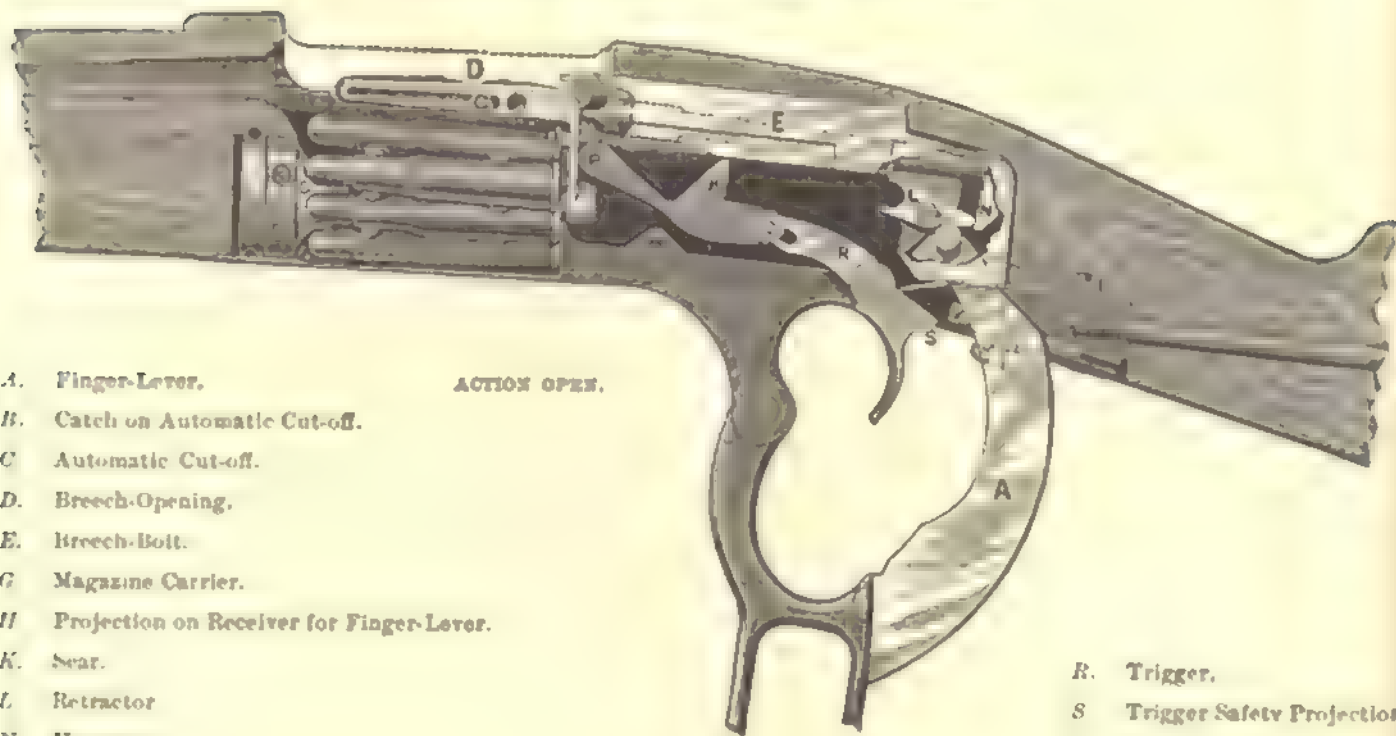
FULL.

SAVAGE rifles can also be furnished to take the 20⁰⁰ smokeless cartridges if so ordered



This steel plate is $\frac{1}{4}$ inch thick. The perforations were made by the .30, expanding bullet and regular charge of smokeless powder, fired from a Savage magazine rifle at a distance of thirty feet. The holes are one-half inch in diameter, while the bullet is only .303 or about .30 caliber. This is caused by the expanding of the bullet on the first impact. The penetration of the regular metal covered bullet in pine is about 50 inches.

DESCRIPTION OF SYSTEM. Model 1899.



- ACTION OPEN.**
- A. Finger-Lever.
 - B. Catch on Automatic Cut-off.
 - C. Automatic Cut-off.
 - D. Breech-Opening.
 - E. Breech-Bolt.
 - G. Magazine Carrier.
 - H. Projection on Receiver for Finger-Lever.
 - K. Sear.
 - L. Retractor
 - N. Hammer
 - P. Sear Screw.

- R. Trigger.
- S. Trigger Safety Projection.
- U. Recoil Shoulder.
- V. Trigger and Lever Lock.

LOADING OF THE SYSTEM.

The magazine is charged while the system is open. Open the Finger Lever *A* to fullest extent (see preceding cut). Insert cartridges into the magazine by pushing them ahead to rear down and under the Catch *B* on Automatic Cut-off *C*. The thumb or forefinger of the right hand should be used in this operation (see cut, page 22).

The capacity of the magazine is five cartridges. A sixth cartridge can be placed in the breech opening *D* above the catch *B*. On closing the Finger Lever *A*, the cartridge in the breech opening *D* will be carried forward by the Breech Bolt *E* into the chamber of the barrel. The rifle is then ready to fire.

THE RIFLE AS A SINGLE LOADER.

The act of putting a cartridge into the breech opening *D* forces the Automatic Cut-off *C* back into its recess in the Receiver. When the uppermost cartridge in the magazine below the line of movement of the Breech Bolt *E*, so that only the cartridge in the breech opening will be engaged by the breech bolt on its forward travel.

THE RIFLE AS A MAGAZINE GUN.

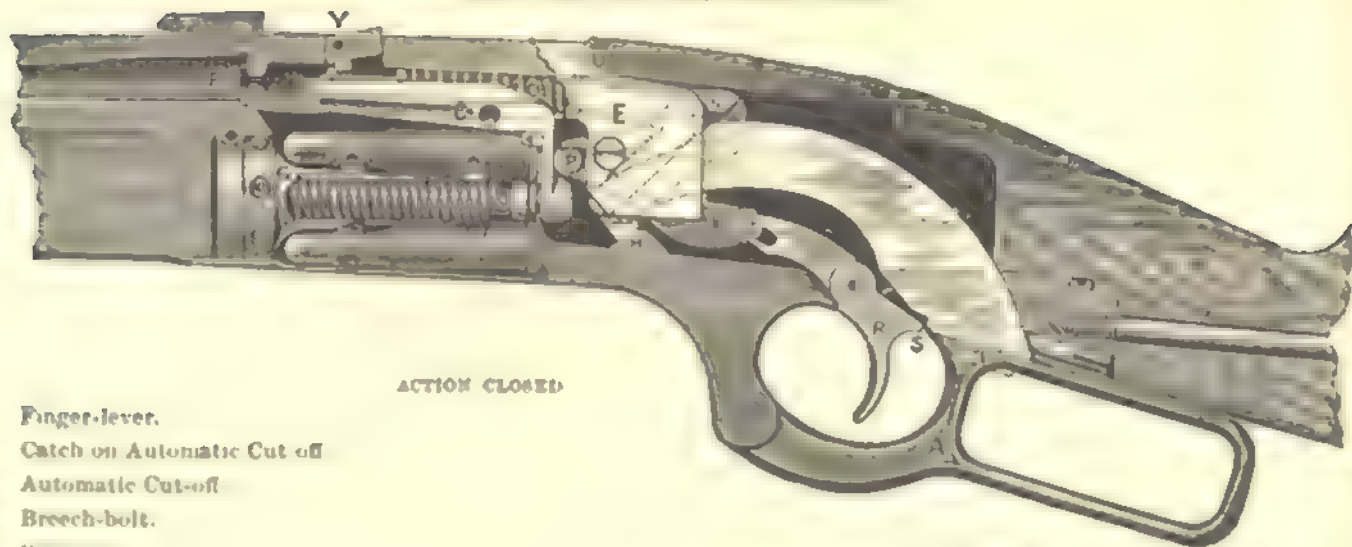
If the operator does not place a cartridge in the breech opening *D*, and there are one or more cartridges in the magazine, the Breech Bolt *E* on its forward travel will engage and carry forward into the barrel chamber the uppermost cartridge in the magazine.

The Automatic Cut-off *C* has on its face a projection *T* which ejects the fired shells, after being withdrawn by the Extractor *F* in the Breech Bolt *E*.

LOADING MAGAZINE, MAGAZINE ACTION.

If it is desired to have the cartridges in the magazine and none in the chamber of the barrel, load one or more cartridges into the magazine, press with the finger of the left hand the Automatic Cut-off *C* back into its recess, keeping it back while the Finger Lever *A* operates the Breech Bolt *E* forward and beyond the point of engagement with the cartridge head in the magazine. Conclude the closing of the action.

SAVAGE RIFLE, Model 1899.



ACTION CLOSED

- A.** Finger-lever.
- B.** Catch on Automatic Cut-off
- C.** Automatic Cut-off
- E.** Breech-bolt.
- F.** Extractor.
- G.** Magazine Carrier.
- H.** Projection on Receiver for Finger-lever.
- K.** Sear
- N.** Hammer.
- O.** Main Spring.

- P.** Sear Screw
- R.** Trigger.
- S.** Trigger Safety Projection.
- T.** Recoil Shoulder
- V.** Trigger and Lever Lock
- Y.** Indicator

Model Rifle 1899 is manufactured with the new hammer indicator.

When the hammer is at full cock, the Indicator Y projects above the Breech-bolt, when the rifle is fired or the hammer is down, the Indicator is flush with the top of the Breech-bolt.

When the action is closed, or the finger pressing back the Automatic Cut-off C into its recess, the numbers on the Magazine Carrier G show, through the opening in the receiver, the number of cartridges contained in the magazine.

The Breach bolt E is positively operated by the Finger-lever A, without any intermediate mechanism and when closed ready for firing is immovably locked by the Finger-lever A resting on a solid projection at H in the receiver. The recoil of the discharge is supported at I and is in the direct line of the strain.

The Breach bolt E carries the extractor F, Retractor L, Hammer V, Main Spring O, and Indicator Y.

FIRING AND SAFETY MECHANISM.

The firing mechanism is operated as follows. If the rifle has been fired, the act of opening the Finger-lever A and thereby Breach bolt E rocks the Retractor L by engagement with the Sear Pin P and the Hammer V (with firing pin) is positively restricted and held back from the face of the Breach bolt E. The closing movement of the Breach bolt brings the Hammer V in engagement with the face of the Sear K, compressing the Main Spring O and the rifle is fully cocked.

PREMATURE EXPLOSIONS ARE IMPOSSIBLE.

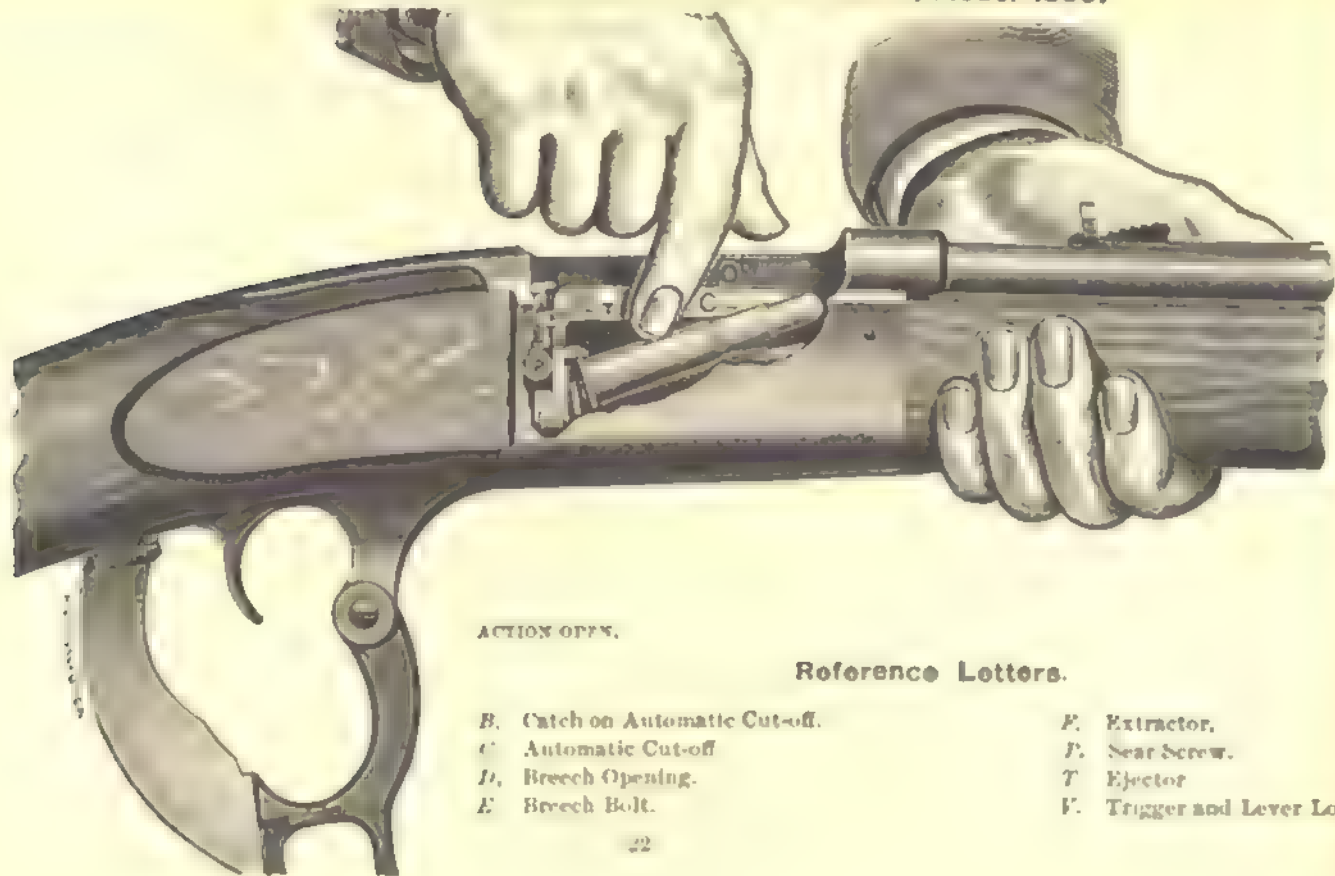
The firing mechanism can be placed in an uncocked position by holding back the Trigger R while closing the Finger-lever A. The Hammer N will in that case pass over, and not engage with the face of the Sear K.

This should always be done when laying the rifle aside, and the trigger should not be stepped when the chamber of the barrel is empty.

The action can be locked by pushing forward the Lock V, which locks the trigger and lever.

The Indicator Y shows the position of the firing mechanism.

LOADING MAGAZINE, SAVAGE RIFLE, Model 1899.



ACTION OPEN.

Reference Letters.

- B. Catch on Automatic Cut-off.
- C. Automatic Cut-off
- D. Breech Opening.
- E. Breech Bolt.

- F. Extractor.
- G. Sear Screw.
- H. Ejector
- I. Trigger and Lever Lock.

TO DISMOUNT THE SAVAGE RIFLE, Model 1899.

It will not be found necessary to dismount the entire mechanism for the purpose of cleaning the rifle. When the butt-stock is removed, most of the mechanism will be in plain view and can be oiled without further dismounting.

If necessary the magazine mechanism can be removed independently of the other parts.

Dismounting: Remove the butt-plate, the butt-stock screw and butt-stock, open the finger-lever to fullest extent, remove the trigger spring screw, trigger spring, bolt-stop screw and bolt stop, remove the finger-lever, bushing screw, push out the finger-lever bushing, displace the finger-lever at pivot joint, withdraw the breech-bolt, remove trigger-pin, punching the same out from left to right, remove the sear screw, take out the sear and trigger, take out the finger-lever, remove the trigger and lever-lock, remove the fore-stock screw and fore-stock, unscrew the magazine spindle screw and remove it free from receiver, remove the magazine carrier and magazine spindle, and then remove automatic cut-off and spring.

TO DISMOUNT THE BREECH-BOLT.

Remove the hammer bushing screw, pull out the hammer with the main spring, hammer indicator washer and bushing, turning the hammer to clear the indicator, punch out the firing pin securing pin, unscrew the firing pin and remove the retractor screw.

Punch out the extractor pin from top to bottom, the extractor will then be free. Punch out the hammer indicator pin and the indicator will then be free.

To separate the magazine spindle and the magazine carrier, pull the magazine spindle out of the magazine carrier, the magazine spring can then be removed.

TO ASSEMBLE THE SAVAGE RIFLE, Model 1899.

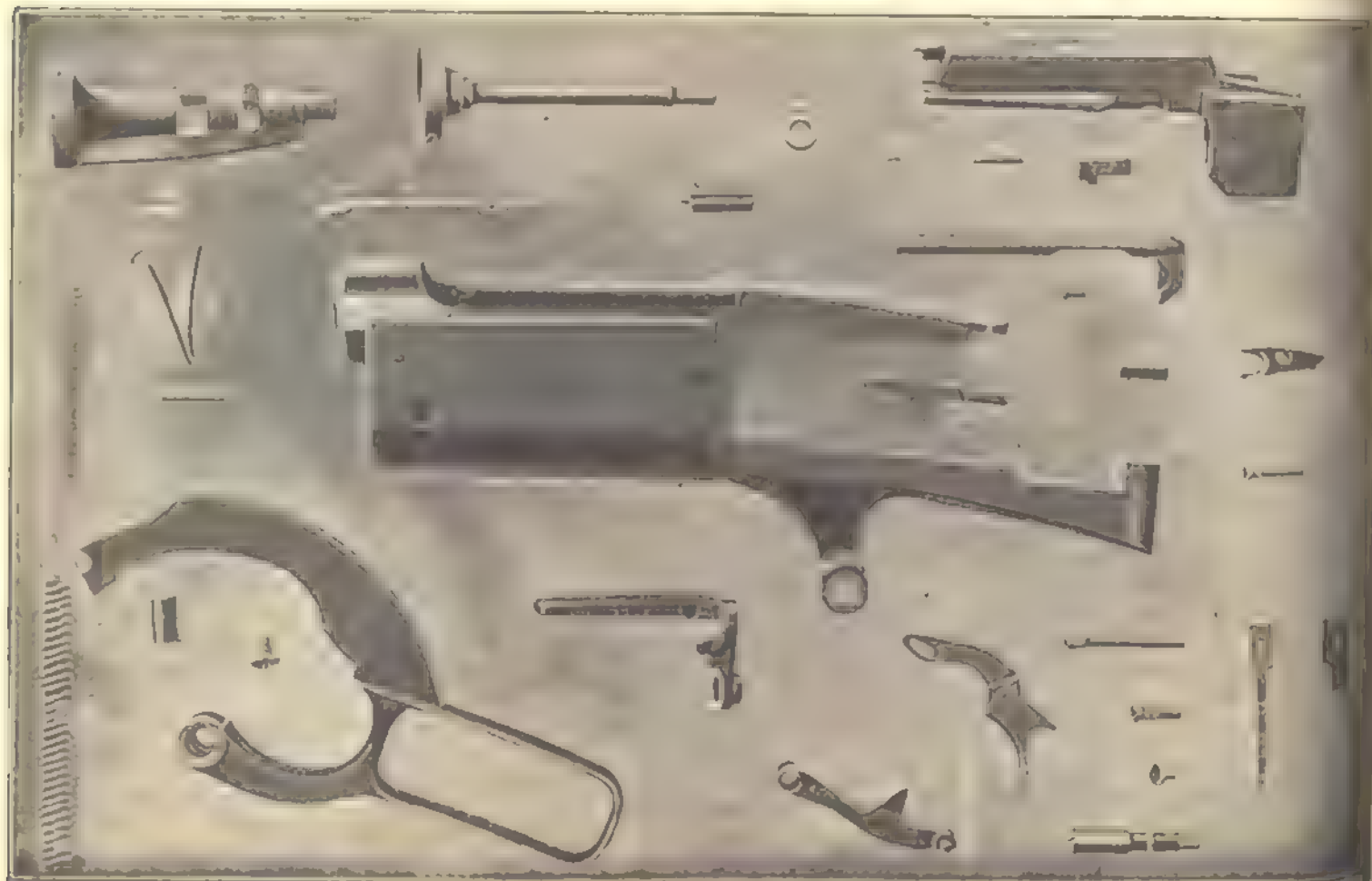
Replace the parts in the reverse order from that given for dismounting, keeping in mind the following points:

Replace automatic cut-off and the spring. Replace the magazine carrier, magazine spindle, and magazine spring together, and give tension to magazine carrier by turning the spindle, with a screw-driver, from right to left. Insert the spindle screw. Do not give too high a tension to magazine spring, as it will make the loading of cartridges into the magazine unnecessarily hard.

In replacing the retractor in the breech-bolt, be sure that the retractor is in retracting position, (as shown at 1, page 18), before replacing the hammer and breech-bolt.

NOTE. Model 1895 has a retractor spring.

COMPONENT PARTS OF SAVAGE HAMMERLESS REPEATING RIFLE, .303 Caliber. Model 1899.



PRICE LIST OF COMPONENT PARTS, Model 1899.

No. 1	Receiver,	\$7.00
2	Breech bolt,	3.00
3	Hammer, . . . . .	.60
4	Firing Pin, . . . . .	.40
5	Hammer Bushing, . . . . .	.15
6	Hammer Retractor, . . . . .	.30
7	Seat, . . . . .	.40
8	Trigger, . . . . .	.40
9	Finger lever,	1.75
10	Finger lever Bushing, . . . . .	.25
11	Extractor, . . . . .	.30
12	Magazine Carrier,	1.00
13	Magazine Saddle, . . . . .	.50
14	Trigger and Lever Lock, . . . . .	.50
15	Automatic Cut-off,	2.00
16	Automatic Cut-off Spring, . . . . .	.25
17	Main Spring, . . . . .	.30
18	Trigger Spring, . . . . .	.30
19	Magazine Spring, . . . . .	.30
20	Barrel Stud, . . . . .	.25
21	Magazine Spindle Screw, . . . . .	.15
22	Finger lever Bushing Screw, . . . . .	.15
23	Hammer Retractor Screw, . . . . .	.10
24	Hammer Bushing Screw, . . . . .	.10

No. 25	Seat Screw,	\$.30
26	Trigger Spring Screw, . . . . .	.05
27	Trigger Pin, . . . . .	.05
28	Extractor Pin, . . . . .	.05
29	Firing Pin, Securing Pin, . . . . .	.05
30	Bolt Stop Screw, . . . . .	.05
31	Bolt Stop, . . . . .	.10
32	Barrel (Round),	9.00
32A	Barrel (Octagon),	10.50
32B	Barrel (Half Octagon),	10.50
33	Butt Stock,	2.00
34	Butt Stock Screw, . . . . .	.25
35	Butt Plate (Rifle), . . . . .	.30
35A	Butt Plate (Shot Gun), . . . . .	.30
36	Butt Plate Screws, each, . . . . .	.05
37	Fore-arm,	1.00
38	Fore-arm Screw, . . . . .	.05
39	Fore-arm Washer, . . . . .	.10
40	Hammer Indicator, . . . . .	.40
41	Hammer Indicator Washer, . . . . .	.10
42	Hammer Indicator Pin, . . . . .	.05
	Hammer Retractor Spring (for Model 1895), . . . . .	.20
43	Ctg. Stop (Small projecting part on top of Breech-bolt), . . . . .	.25

In ordering give the name and number of the part.

Note: In ordering Butt Stocks or Fore-arms mention if octagon or round fore arm, and if rifle, carbine or shot-gun butt is required.

Savage Rifle.

EXTRAS.

Barrels can not be supplied longer than 30 inches.

Additional length over standard per inch,	\$ 1.00
Fancy American Walnut Stock and Fore-arm,	5.00
Fancy English Walnut Stock and Fore-arm,	10.00
Fancy Circassian Walnut Stock and Fore-arm,	15.00
Blacking Butt Stock and Fore-arm, Style as shown on page 44,	5.00
Blacking Butt Stock and Fore-arm, Style as shown on page 61,	8.00
Nickel-plated Trimmings,	2.50
Full Nickel Plating except barrel,	4.00
Silver-plated Trimmings,	4.00

Full Silver Plating except barrel,	\$10.00
Gold-plated Trimmings,	10.00
Full Gold Plating, except barrel,	22.00
Matted Barrels,	5.00
Extra finish on ordinary stock,	2.00
Swivel and sling strap,	1.00
Leaving off rear sight slot,	1.00
Changing position rear sight slot,	1.00
Chock Piece,	2.00
Pistol Grip,	5.00
Altering length of butt stock or drop. See page 50,	10.00

ENGRAVING.

Grade A. Page 3,	\$ 5.00
Grade B. " 4,	10.00
Grade C. " 5,	20.00
Grade D. " 6,	30.00

Grade E. Page 7,	\$ 40.00
Grade F. " 8,	50.00
Grade G. " 9, and as shown on back cover,	150.00
Name and Scroll,	2.00

SUNDRIES.

Canvas Covers,	\$ 75
Canvas Cases, leather bound,	1.00
Phable Leather Cover,	3.00
Solid Leather Case,	5.00
Carbine Holster,	2.00
Cartridge Belt,	1.00
Brass Cleaning Rod,	30

Brass Cleaning Rod, with revolving handle,	\$ 50
Brass Cleaning Rod, revolving handle,	20
Brass Wire Cleaning Brush,	25
Hickory Cleaning Rod,	40
Field Cleaner,	50
Tires or One, per bottle. See page 28,	25
20. Savage Gun Grease, per tub. See page 28,	15

Important Information.

Rifles should always be properly cleaned and oiled before laying aside.

To perfectly clean the inside of the barrel, take small square pieces of cotton rag, dip in water and push or pull through the bore, using a wood or brass rod or wire. This should be repeated until the rag comes through without being soiled. Next put through several pieces of dry rag until all the moisture is absorbed. Next wet with only rag, for the removal of the water, becomes rusted or leached from the barrel. Cartridges also clean with rag and oil.

The rest of metal parts of the rifle need only wiping off with a clean dry rag, finishing with an oily rag.

The rifle after being handled or fired should always be wiped off and oiled before laying aside. Otherwise rust will form on the metal parts from the moisture of the hands.

Never shoot a rifle when there is any obstruction in the barrel. It is almost certain to form a burning ring at the point where the obstruction was, thereby utterly destroying the accuracy of the barrel, or the barrel may even burst.

In testing a rifle for accuracy, never fasten it in a vise. It is not possible to get accurate shooting by that means. The best way is to rest the rifle on bags filled with sand, taking an easy resting position with the body and arms.

Do not clean a rifle because of occasional mistakes. The trouble may become too serious. Care should be taken not to work back on the main spring hole in the breech bolt, as it is liable to change the action of the spring and firing pin.

In very cold temperatures an oil and grease should be wiped from the main spring firing pin and action as the least oil or grease causes. Mistakes sometimes occur from this cause.

Bullets, however fast their velocity, are subject to the law of gravity, and from the moment they leave the muzzle of the barrel they fall during the trip. Second to feet and a fraction. At a distance of 100 yards, a bullet fired from a Savage rifle with a full charge of No. 1 powder will fall a few inches. This is what is meant by point-blank range for hunting.

Rifles, unless specially ordered, are not selected for accuracy before leaving the factory. They are quite adjustable. Experience shows that shooters do not look through sights exactly the same. However, to say the right way to adjust the sights of a rifle will generally be found necessary to alter the sight somewhat to give perfect satisfaction to adjuster user of the rifle.

To knock the front or middle sight over to one side all that is necessary is a small piece of hard wood or brass and a hammer. The standard measurements of the stocks are as follows:

Length from heel of butt piece to front of trigger 42 inches.

Drop of stock at comb, $1\frac{1}{2}$ inches.

Drop of heel, 3 inches.

Any change from these measurements necessitates manufacturing the stock from the block without the aid of machinery and is expensive work. The charge is \$10.00.

It is possible to convert the 1845 model into the 1849 model, for which there is a charge of \$5.00. This change necessitates a new breech-bolt, hammer indicator, sear, firing pin, hammer, extractor and retractor.

The steel used in the Savage rifle barrels is of the finest possible quality. Every batch, technically known as a "heat," is tested by the Government tester at Watertown Arsenal. The tensile strength averages 115,000 pounds to the square inch, and the elastic limit 75,000 pounds to the square inch. The steel is manufactured by the well-known firm of Sjauling & Jennings of Jersey City, N. J., who supply large quantities to the United States Government for rifle barrels.

Drift is the term applied to any deviation from the vertical or horizontal planes of fire, other than that caused directly by the force of gravity.

Drift is occasioned by the resistance of the air, and the amount and direction is influenced by the twist of the rifling and velocity and form of the bullet. This results in bullets of different construction and weight, and with different charges, shooting to the right or left.

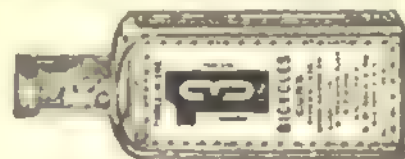
In reloading Savage ammunition, care should be taken not to overcharge, especially the paper patched and miniature lead bullets. If even one grain is used over the regular loads, these bullets are liable to strip and shoot wildly.

SAVAGE GUN GREASE, and Rust Repeller.



Price, per tube, 15 cents

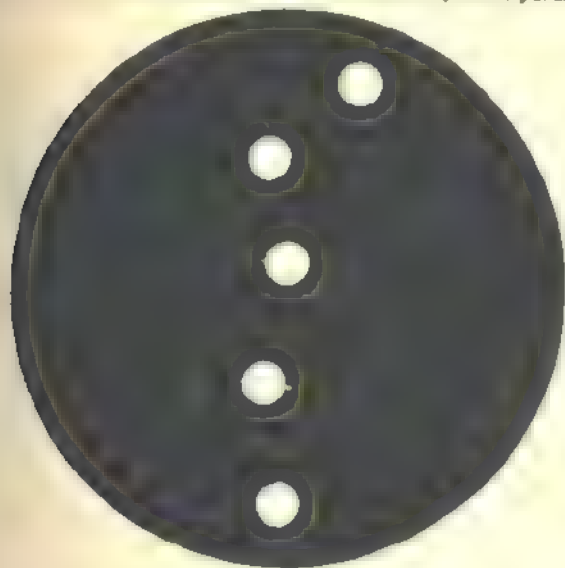
THINK IN OIL Gun Oil,
Lubricates, Cleans, and Repels Rust.



Price, 3 oz. bottle, 25 cents.

Targets Made with Savage Rifle.

Point Blank range. Sights not altered to shoot up to 200 yards.



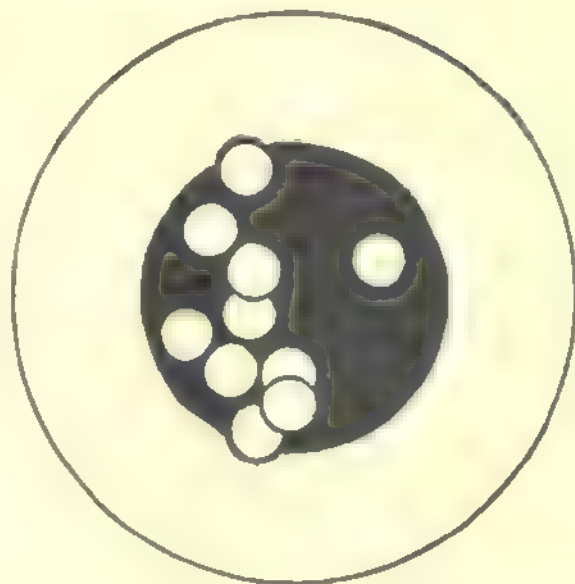
50 yards.

75 "

100 "

150 "

200 "



Regulation 8-inch bull's-eye

Shots at 50, 75, 100, 150 and 200 yards.

The marksman fired the first shot at 50 yards, then walked back to 75, 100, 150 and 200 yards, firing a shot at each distance, and without altering the sights or calculating the different distances.

Regular Bullet Cartridge, No. 1.

Ten shots at 100 yards. Actual size bull's-eye

Mililature Lead Ballot Cartridge, No. 4.

Savage Cartridges.

CALIBER .303. CASES CONTAIN 1,000 CARTRIDGES.

Cartridges are packed 20 in a box.

It is not always necessary to use long range cartridges in the Savage rifle. Cartridges Nos. 1 and 2 are excellent for short range or small game.



REGULAR SMOKELESS POWDER CARTRIDGE.



REGULAR BULLET.
Lead, with Nickel Cover.



EXPANDING SMOKELESS POWDER CARTRIDGE.



EXPANDING BULLET.
Lead, with Partial Nickel Cover.



BLACK POWDER CARTRIDGE.



REGULAR BULLET.
Lead, with Nickel Cover.

Cartridge	Price per M Loaded Cartridges.	Price per M Unloaded.	Price (in M) Pump Rifle.	Price per M Pump Rifle.	Gross Powder.	Gross Bullet	Gross Complete Cartridge.
1 Regular	\$8.00	\$6.00	\$8.50	\$6.50	22	180	202
2 Expanding	\$8.00	\$6.00	\$8.50	\$6.50	22	185	200
3 Black	\$2.00	\$0.50	\$8.50	\$6.50	10 Black	180	200

For short ranges and in places where it would not be safe to fire full charges, use Nos. 4 and 6.



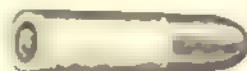
MINIATURE SMOKELESS CARTRIDGE.
Grooved Shell.



MINIATURE BULLET.
Lead.



PAPER PATCHED SCHUTZEN TARGET CARTRIDGE.



PAPER PATCHED
BULLET
Lead.



MINIATURE METAL COVERED CARTRIDGE.



MIN. METAL COVERED
BULLET
Lead, with metal cover.

All the above six Cartridges can be used in the .303 Savage Magazine Rifle or the Savage Carbine without any change being made in the arm. The metal coverings of the different bullets are made of a soft alloy, which does not injure or wear the rifling of the barrel.

Cartridge	Price per M Loaded Cartridges.	Price per M Bullets	Price per M Powder M Cartridge No. 4	Price per M Powder M Cartridge No. 5	Grains Powder.	Grains Bullet	Grains complete Cartridge
Miniature.	20.00	4.00	18.50	1.50	12	100	272
Paper Patched.	20.00	10.00	18.50	1.50	12	185	372
Miniature Metal Covered.	32.00	7.00	18.50	1.50	12	100	282

Description of Savage .303 Caliber Cartridges.

No. 1. Regular Cartridge. with completely metal covered bullet designed for long range target shooting, is well adapted for wild goose shooting. The metal cover will not rupture on striking flesh or wood. Its penetration is about 50 inches in clear white pine. Range, 2,000 yards.

Savage bullets will not wear the rifling of the barrel. The jackets of the bullets of No. 1, No. 2 and No. 3 cartridges are composed of an alloy of nickel and copper. No steel is used. Seven thousand No. 1 cartridges have been fired in a Savage rifle without showing any signs of injury to the rifling.

No. 2. Expanding Cartridge. For big game. Its high velocity, soft-nosed, expanding bullet makes it more effective than the largest black powder cartridge. Range 2,000 yards. Perfect blank sporting range for hunting, 725 yards. This bullet will expand upon striking flesh.



BEFORE EXPANDING.

Its penetration is about ten inches in clear white pine, making a very large hole.

Penetration in steel, see page 17.

For effectiveness, see page 46.



AFTER EXPANDING.

No. 3. Black Powder Cartridge. A medium range cartridge. Accurate up to 600 yards. The regular bullet is used. Black powder can be used in all Savage cartridges, 40 grains being as much as the shell will hold. Full sized lead bullets can not be used with a shell full of black powder, or any of the charges of smokeless powder, as the quick twist of the rifling strips the lead, even when of hard alloy.

No. 4. Miniature Cartridge. This cartridge with its small miniature lead bullet, is very accurate up to 100 yards. It is suitable for small game or short range target shooting. Cost of reloading one-half cent. The shells can be reloaded immediately. No wadding or filling of any kind is used between the powder and bullet. 40 grains of Savage No. 1 or Model, Smokeless Powder is the charge. 10 grains of black powder can also be used instead of the smokeless. This miniature lead bullet must not be crimped. Barrel should be kept well cleaned when using this cartridge.

No. 5. Paper-patched Bullet Cartridge. Designed for regular target shooting up to 200 yards. Not to be crimped. Information on mould, page 43. Patches, page 43.

No 6. **Miniature Metal-Covered Bullet Cartridge.** A variable cartridge for short range targetshooting. The Miniature shell is steel and the metal covered bullet must be strongly crimped. This cartridge makes excellent targets at two hundred yards. It is very clean, as the jacket on the bullet prevents leading of the barrel.

The load for this cartridge is ten to twelve grains of our No. 1, Model 1890, smokeless powder. Shells can be reloaded a number of times with this charge.

LUBRICATED WIRE-PATCHED BULLET CARTRIDGE.

Loaded Cartridges, Price \$38.00 per thousand

Bullets, " 10.50 " "



This bullet is wound with Lubricated Fiber Covered Wire. These bullets can be had in 160, 180 and 200 grains weight. The powder charge is eighteen grains of the No. 1 1890 Model Savage Powder. The bullet expands in flesh and makes a very accurate cartridge. It can be used with forty grains of black powder.

The different cartridges mentioned above can be used in the same .303 Savage Magazine Rifle or Carbine without any change or adjustment whatever.

RELOADING SMOKELESS POWDER CARTRIDGES.

Savage shells can be reloaded a number of times according to the charge. In full charges the pressure is considerably more than from black powder. The shells therefore will not last as long. Another cause for their shorter life is the action of the mercurial gases from the decomposition of the mercury used in the primers. Smokeless powder requires a stronger primer and therefore more of the mercurate than is used in primers for black powder. This mercuria gas acts on the zinc in the composition of the brass, thereby causing oxidation of the metal.

POINT BLANK RANGE.

Bullets, however fast their velocity, are subject to the law of gravity and from the moment they leave the muzzle of the barrel, they fall during the first second 16 feet and a fraction. At a distance of 200 yards a bullet fired from a Savage rifle, with a full charge of No. 1 powder, will fall a few inches. This is what is meant by point blank range for hunting.

Advantages of the Savage System.

Breech.

1 Strong, safe, solid breech bolt—breech supported in direct line of fire.

Gas.

2 No powder gas can escape to the rear of the breech mechanism to injure the eye of the operator in the event of a broken primer, or defective shell. The operator is protected by a solid wall of steel.

Extractor.

3 Positive, multiplied extracting power.

Ejector.

4 Positive ejector, shells ejected to the side of the operator and away from his face.

Safe.

5 The very important necessity of **safety to the operator** should never be overlooked. The Savage is the only repeating sporting rifle on the market that **has no open communication to the rear.** An excessive charge of high explosive can be fired in any rifle sufficient to destroy the barrel but the operator using the Savage can not be injured.

THE ACTION CAN NOT BE BLOWN OPEN.

Cartridges can not be fired until the breech mechanism is absolutely closed and safely locked.

6 The entire system, trigger finger lever breech bolt, etc., is locked by operating the trigger and lever-lock.

**The Only
Hammerless
Repeating Rifle.**

7 No moving hammer to distract the aim of the operator. The rifle has no projecting hammer to be caught and thereby cause accidents.

Simplicity.

8 The position of the firing mechanism is always shown by an automatic indicator.

Weight.

9 Few springs and component parts.

Action.

10 Light weight.

11 Easy smooth smooth action—the balance and aim of the rifle is not disturbed while firing the magazine cartridges.

Rapidity.

12 The rifle can be easily and accurately operated from the shoulder position. The enclosed hammer is cocked by the closing movement of the finger lever, thus pressing the rifle to the shoulder and steadying the aim.

Finger-Lever.

13 The cross-bar arm of the finger lever always protects the trigger and prevents it from being caught and operated accidentally.

Single-Loader.

14 Rapid single loader, can be operated independently of the magazine.

Magazine Indicator is a Positive Advantage.

- 15 Cartridges in the magazine are always automatically indicated by a number.
- 16 The magazine is protected by a sliding cover, which will not open.
- 17 Cartridges in the magazine are held in place by a spring, which prevents the cartridges from falling out, thus saving the trouble of reloading the magazine.

Automatic Cut-Off. Bullets. Powder. Smokeless Powder.

- 18 Cartridges in the magazine are separated, each by a stop, and no bullets touch the papers of other cartridges. Safety is thus secured.
- 19 The magazine can be loaded while the cartridges of the rifle are in the magazine, and cartridges in the magazine are in readiness for loading, without the need of the magazine.
- 20 Cartridges in the magazine are automatically held in reserve while using the rifle as a single shot.
- 21 Metal coated bullets give greater penetration than ordinary lead bullets.
- 22 Either black or smokeless powder can be used in these rifles.
- 23 The rifle is operated without the need of a trigger, and location of operator not detected by any smoke.
- 24 Less recoil and noise than black powder.
- 25 No loading of the magazine, and the rifle is accurate after repeated firing.
- 26 Greatly increased penetration over black powder.
- 27 Extremely long range.
- 28 Light-weight ammunition.
- 29 High velocity and consequently flat trajectory. Velocity 2000 feet per second per inch range within hunting distances.
- 30 No corrosion of steel or firing. No need of cleaning for reloading.

Miniature.

- 31 By using the rifle, bullets and smokeless powder charge, a single cartridge is produced, suitable for gallery practice or shooting small game.

Expanding Bullets.

- 32 Soft nose expanding bullets are effective to the longest range.

Perfect balance of the rifle is a great working feature, and is unsurpassed when the absence of all knobs, protuberances or magazine below the line of the frame, a genuine universal compact rifle, the rifle is very handsome and symmetrical in appearance.

Savage Rifle Powder.

No. 1, 1899 MODEL.

Price Per Pound Can, \$1.50.

This powder is the new No. 1, 1899 Model, Savage Powder and all Savage .201 Cartridges, including the Little lead miniature bullet No. 4 Cartridge, can be reloaded with this powder. The charges are as follows:

No. 1, Regular Bullet, smokeless cartridge	25 grains
No. 2, Expanding Bullet, smokeless cartridge	22 "
No. 4, Lead Bullet, miniature, smokeless cartridge	6 "
No. 5, Paper Patched Bullet, smokeless cartridge	12 "
No. 7, Miniature Metal Covered Bullet, smokeless cartridge	10 or 12 "

Lubricated Wire Patched Bullet cartridge, 18 grains. Sweep the top of the measure straight across.

The Savage Arms Company guarantees that the Savage smokeless powder will not freeze or deteriorate in the lowest temperature.

Measures are liable to freeze during extreme cold weather when too much oil has been used in the mechanism. Care should be taken to wipe off oil and grease from the spring in the measure and a little kerosene oil when the thermometer registers below zero.

Savage smokeless powder contains no nitro-glycerine, or other explosive, deleterious or unstable substances. It will be found thoroughly reliable, producing uniform pressure and decreased recoil at a high velocity.

CAUTION!

In using smokeless powders the directions MUST be followed carefully. We will not be responsible for mistakes from over charges, or the use of powder not recommended.

There is a great variety of smokeless powders manufactured and for different purposes. What is right for the charge in will not be for the rifle and what is correct for the large caliber rifle will not be for the small caliber rifle or vice versa. A certain quantity of any smokeless powder may be safe and the same quantity of another smokeless powder may do some injury.

All charges of smokeless powder are much harder on walls than black powder and they can be reloaded many times without trouble from splitting or breaking.

Orders for Nos. 1 and 2 powders will be filled with the No. 1, 1899 Model, smokeless powder, which takes the place of the two old Savage powders.

The Savage Rifle is guaranteed only when used with ammunition manufactured and loaded by the Savage Arms Company.

Advantages of Smokeless Powder.

The absence of smoke enables the operator to lie concealed and retain an unobstructed view of the game or the enemy. Several varieties of smokeless powder do not even emit a flash in the darkest night.

The longer range gives the soldier or sportsman using smokeless powder an immense advantage over those using black powder guns and ammunition, while the greater penetration makes the small bullet extremely effective. Steel boiler plate, equal in strength and thickness to the material employed in the construction of torpedo boats, is easily perforated by modern small arms using smokeless powder ammunition.

The extremely high velocity is obtained by the slow combustion of smokeless powder, which continues its expelling action, accelerating the speed of the projectile until it leaves the muzzle of the gun. The slow—comparatively speaking—action of the new explosive accounts for the fact that, although the force and speed of the new bullet are so much higher than the old lead bullet in front of black powder, there is about 65 per cent less recoil.

Those firing the "Savage Rifle" experience no inconvenience from need in using cartridges loaded with smokeless powder.

The velocity of the bullet being 2,000 feet per second, as against from 1,100 to 1,400 feet per second in heavily loaded black-powder cartridges, gives so flat a trajectory that for hunting distances up to 225 yards, rifles sights need not be raised.

The non-fouling of the barrel can be appreciated by all sportsmen—hundreds of shots can be fired without the necessity of cleaning the bore. The barrel of any rifle should, of course, be properly cleaned and oiled before laying the weapon aside.

It was at first supposed, and in fact used as an argument in favor of adopting the small-caliber bullets with their high velocity, that they would more often wound than kill the enemy, thereby crippling his movements, but facts have not borne out the supposition.

The largest game in the world, the royal Bengal tiger of India, the elephant and the rhinoceros of Central Africa, are now being successfully hunted and slain by men using the .30-caliber Savage rifles. Sportsmen who have never tried the small-caliber rifles and smokeless powder ammunition are somewhat skeptical as regards the killing or stopping power of the small metal-covered expanding bullets. These are far more deadly than black powder ammunition, however large the caliber. The secret of the deadly effect of these small projectiles lies in their expanding qualities and extraordinary high velocity, which impart a percentage of their energy to the otherwise inert flesh and bone, and these substances, being acted upon by so quick a blow, become themselves projectiles, following a well-known mechanical law—erecting the surrounding tissues and bone, and leaving a path of destruction which is widened by resistance encountered by the bullet.

The combination of a metallic or metal covered bullet and the smokeless powder is necessary to secure high velocity. The high velocity resulting from the use of smokeless powder is only possible when combined with the smokeless bullet. If a bullet is emitted from one of these cartridges and the primer struck, no explosion of the powder will occur. The small diameter of the bullet makes it necessary to lengthen the same in order to secure sufficient weight. The sharp point of the bullet containing 10 grains, is necessary to keep the point of the bullet end on and prevent key-holing.

The rapid twist of the rifling and the great pressure of smokeless powder compels the use of a harder yielding metal than lead, as a soft lead bullet would be blown directly out of the barrel, the bullet would strip. The body of the new bullet is formed of lead, covered with a metal jacket.

SIBLEY COLLEGE,
CORNELL UNIVERSITY,
SAVAGE ARMS COMPANY,
Ithaca, N. Y.

Department of Experimental Engineering,
R. C. CARPENTER,
Ithaca, N. Y., Nov. 8, 1898.

Gentlemen:—I have the pleasure of reporting the following as the result of tests of cartridges for 0.20 caliber rifle and loaded with smokeless powder by the Savage Arms Company.

The cartridges were fired at the ordinary temperature of the air and also after they had been maintained in a bath of liquid carbonic acid for six hours and had reached a temperature approximating 100 degrees below zero care being taken to handle the cold cartridges with non-conducting material, and to fire them immediately after removing from the carbonic acid.

In every case the cartridges apparently fired as well when at the extremely low temperature as at an ordinary temperature of the air, although measurements of velocity which were made by firing into a suspended target indicated that the effect of the extreme cold was to reduce the velocity about 75 per cent.

The target employed was a block of pine 24 inches in length and about 8 inches in diameter suspended in a cast iron fitting and backed with a cast iron plate. In every case the striking energy was sufficient to carry the ball entirely through the wooden block and to reduce it to very small fragments by the impact against the iron plate.

It would seem from these experiments that the powder which is employed in the Savage cartridges could not be frozen so as to sensibly reduce its energy in any temperature likely to be met with by civilized people.

Very truly yours,

R. C. CARPENTER,
Prof. of Experimental Engineering.

Sporting and Target Front Sights.

FOR SAVAGE MAGAZINE RIFLE.

No. 1.



Lyman Ivory Bead
Front Sight.
Price \$1.00.

No. 2.



Lyman Ivory Hunting
Front Sight.
Price, 50 cents.

No. 3.



Lyman's Patent Ivory Bead
Wind-Gauge Sight.
Price \$2.50.

No. 4.



Rocky Mountain Front
Sight Knife Edge.
Price, 25 cents.

No. 5.



USED WITH GLOBE.
Lyman's Patent Combination Ivory Front Sight.
Price \$1.00



USED WITH IVORY.

No. 6.



Lyman's Patent
"Jack" Sight.
Price, \$1.00

No. 7.



Lyman's Sporting
Wind-Gauge Sight.
Price, \$5.00.

No. 8.



SHOWING GLOBE.

Lyman's Wind Gauge Target Sight.
Price, \$5.50.



SHOWING APERTURE.

No. 9.



Sheard Patent
Copper Bead Hunting Sight.
Price, \$1.50.

No. 10.



SHOWING APERTURE.



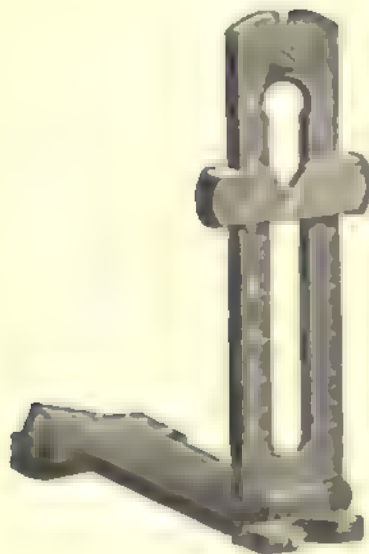
SHOWING GLOBE.

Lyman's Patent Target Sight.
Price, \$1.50.

Sporting and Target Rear Sights.

FOR SAVAGE MAGAZINE RIFLE.

No. 11.



Sporting Leaf Sight.
Price, \$1.75.

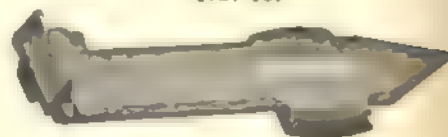
No. 12



Leaf Sight.
Price, \$1.00.



No. 13.



Express Sight.
Price, \$1.50.

No. 15.



Spirit Level.
To fill rear sight slot.
Price, \$1.00.

No. 14.



Rocky Mountain Rear Sight (Buckhorn).
Price, 50 cents.

No. 16.

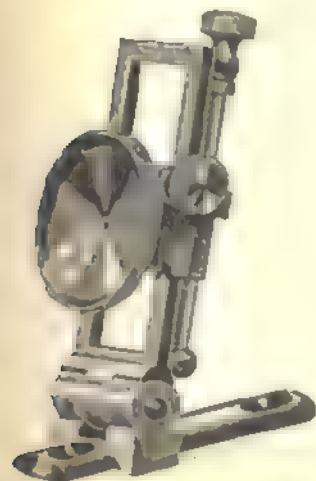


Blank to Fill Rear Sight Slot.
Price, 25 cents.

Sporting and Target Peep Sights.

FOR SAVAGE MAGAZINE RIFLE.

No. 17.



Savage Wind Gauge Peep Sight.

Price, \$2.00.

PLACED ON TANG.

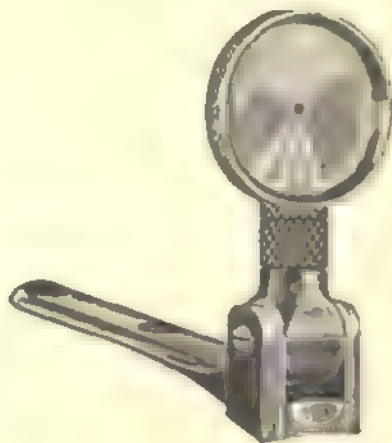
No. 18.



Savage Combination Rear Sight.

Price, \$3.00.

No. 19.



Savage Combination Rear
Sight with Cup Disc

(Can be used with or without Disc.)

Price, \$3.50.

Telescopes for Savage Magazine Rifles.

JULIUS KING OPTICAL CO. TELESCOPE.

Achromatic throughout. Water and dust proof. Always in focus for any range. Field of vision large and highly illuminated throughout. Fitted with non-breakable cross hairs. Encased in non-perforated seamless steel tubing fitted to suit the gun.

Three models furnished in three styles magnifying powers 3 to 18 diameters, and lengths correspondingly from 14 to 26 inches. The telescope can also be used as a night glass. Prices from \$10.00 to \$25.00.

Mountings are of blued steel having ball and socket joints eliminating vibration and saving permanency of adjustment. Designed to hold telescope either in top or side of gun as desired. Does not interfere with ordinary sight which mounted on gun. Accurately and quickly adjusted with micrometer scale graduated to $\frac{1}{16}$ of an inch for any range or wind. Mountings from \$3.00 to \$5.00. EVERYTHING GUARANTEED THE BEST.

THE JOHN W. SIDLE TELESCOPE.

Specially adapted to repeating rifles, allowing unobstructed use of open sights. All have adjustment to suit different eyes. Price—Telescope with mountings, \$10.00 up to \$25.00. Mountings, \$2.50 to \$5.00.

THE DUPLEX RIFLE TELESCOPE SIGHT.

Lawson C. Cummins.

Wide field of vision. High illumination. Achromatic. Seamless brown steel tubes. Price—Telescope with mountings \$12.00. All sights are fitted with elevation movement, but the wind-gauge movement is only put in on special order, and costs \$1.00 extra.

L. N. MOGG TELESCOPE.

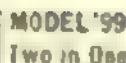
For hunting and target purposes. Prices—Telescope with mountings, Nos. 1 and 2, \$7.50. Mountings, \$2.50.

Descriptive catalogues containing full explanations and advantages of above Telescopes sent on application.

SAVAGE ARMS CO., Utica, N. Y.

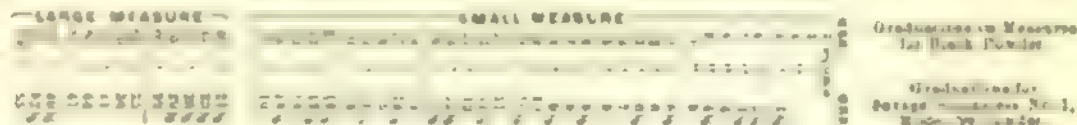
FOR SAVAGE 303 MAGAZINE RIFLE.

FOR SAVAGE 303 MAGAZINE RIFLE.



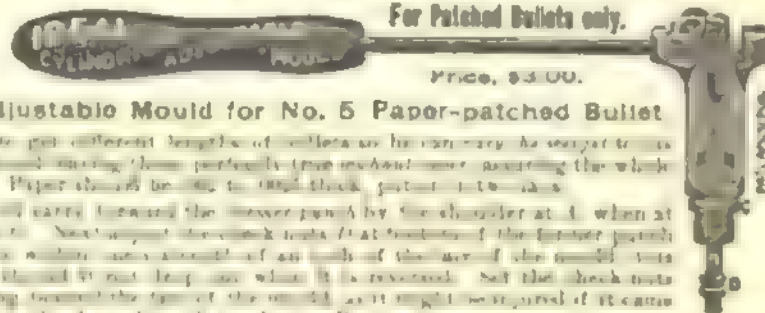
The figures in the first column are the graduations on the Ideal Universal measure, Model 1870, which are for grain weight black powder only.

10. The same 100-grain samples weights of the Range Hercules, No. 1, 1470 Powder, for same ball measurements as black powder



THE "IDEAL" CYLINDRICAL ADJUSTABLE MOULD.

For Patched Bullets only



Price \$1.00

"Ideal" Cylindrical Adjustable Mould for No. 5 Paper-patched Bullet

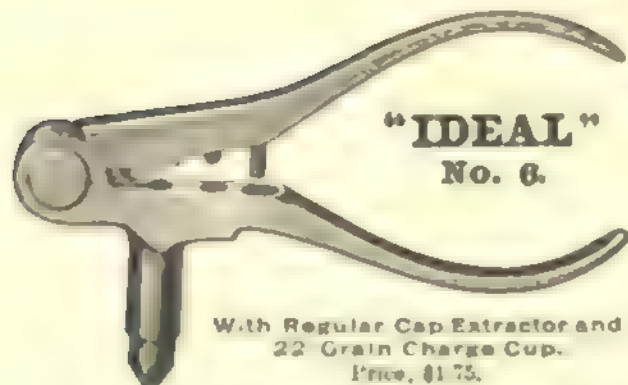
The admirable manner in which the artist has put different lengths of clothes in his entry, he sought to be
 drawn by with the least of a stroke, and the hand of the artist, perhaps, the most perfect, was showing the whole
 length of the hand, leaving the bare of the title. The artist, in his work, has a great deal to do.

[illegible]

The ideal dagger was to be used to go down into the heart of the nation, at the point of the mind when revealed, does not mean the dagger is to be used to go down into the heart of the nation. With the belief of wood used for striking the cut off, was upon the dagger - which was used for striking the heart of the nation.

Savage Ideal Reloading Tools.

FOR SAVAGE .303 MAGAZINE RIFLE.



"IDEAL"
No. 6.

With Regular Cap Extractor and
22 Grain Charge Cup.
Price, \$1.75.



Price, 25c.



Charge Cup. Price, 15 cents each.
For Savage No. 10 Powder Neck, Model 1899.
Charge Cup 22 grains. Charge Cup 30 grains
" " 12 " " " 0 "



IDEAL DIPPER

Mould for No. 4 Miniature
Lead Bullet.
Price, \$1.10

For Moulding Bullets.
Price, 50c



Special Cover
for Muzzle Neck.
No. 303.
Price, 50c



Muzzle Cap.
No. 303.
Price, 50c



**IDEAL No. 3
SPECIAL.**

With Regular Cap Extractor, 22
Grain Charge Cup, and Regular
Chamber A.
Price, \$2.50.

**MUZZLE
CAP FOR**



For No. 3
Tool.
Price, 50c.



Miniature Chamber B.
For No. 3 Tool, Price 50c



Miniature B.
Price 50c

Savage Ideal Reloading Tools.

FOR THE SAVAGE 303 MAGAZINE RIFLE.

DESCRIPTION

The No. 1 Tool will reload the following 303 Savage cartridges:

- No. 1 Regular Heavy Smokeless Cartridge 12 grains No. 2 Miniature Metal Covered Bullet 12 grains
No. 3 Loading Rifle Cartridge 12 grains

When No. 1 Tool is used with regular chamber A will reload the following 303 Savage cartridges:

- No. 1 Tool crimps.
The No. 1 Tool will reload the following 303 Savage cartridges:
No. 1 Regular Heavy Smokeless Cartridge 12 grains No. 2 Miniature Metal Covered Bullet 12 grains
No. 3 Loading Rifle Cartridge 12 grains

Chamber A crimps.

The No. 1 Tool with down magazine chamber B will reload the following 303 Savage cartridges:

- No. 4 Lead Bullet Cartridge 12 grains No. 5 Paper Patented Bullet Cartridge 12 grains

Chamber B does not crimp.

When No. 1 Tool is used with regular chamber A will reload the following 303 Savage cartridges:

- No. 1 Tool crimps. When No. 1 Tool is used with regular chamber A will reload the following 303 Savage cartridges:

The No. 1 Tool with regular chamber A will reload the following 303 Savage cartridges:

The No. 1 Tool with regular chamber A will reload the following 303 Savage cartridges:

Miniature Metal Bullets must be seated by hand before crimping.

CAUTION. Loading smokeless powder in the chamber must be done with care. Manufacture of this tool is not responsible for any accidents or injuries caused by the use of this tool.

The Savage Rifle is a dangerous tool when used with smokeless powder. It is not to be used with smokeless powder.

The Savage Rifle is a dangerous tool when used with smokeless powder. It is not to be used with smokeless powder.

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The Savage Rifle is a dangerous tool when used with smokeless powder. It is not to be used with smokeless powder.

DO NOT EXPERIMENT.

The Savage Rifle is a dangerous tool when used with smokeless powder. It is not to be used with smokeless powder.

The Killing Power

OF THE .303 CALIBER SMOKELESS POWDER CARTRIDGES
USED IN THE SAVAGE RIFLE

Effect of the Expanding .303 Bullet on Animal Tissues.

The small .303 caliber expanding bullets, when they first appeared on the market, excited some little derision among old sportsmen and hunters, who had always considered the large caliber bullet necessary to secure effective results on big game. Their experience was only with black powder, and their deductions were correct, under those conditions.

The immensely increased velocity imparted to these small .303 caliber bullets by modern smokeless powder is the secret of the enormous smashing power of the modern small caliber bullet. The soft nose of the expanding bullet expands on impact with the softest tissues, splitting the jacketed portion, deforming the whole bullet to such an extent that the wound made covers a larger area than ever before seen.

So rapidly is the knowledge of these facts spreading that by 1905 it will not be necessary to take up space in a catalogue with this information.

Leg of an Oa before being
struck by a Savage .303
expanding bullet.

Messrs. BAKER & HAMILTON,
San Francisco, Cal.

Gentlemen:—Referring to the Savage I bought from you last year, it may be of interest to you to know that I have succeeded in killing a whale with the .303 magazine bullet. I believe that this experience is very exceptional and probably quite different from any testimonials you have received heretofore. In addition to this I have shot other large game. I consider it the best rifle I have ever used, and I have used all kinds of modern repeating rifles and am free to say that I prefer the Savage to any.

Yours very truly,

E. T. EZEKIEL,
Resident Agent North American Commercial Co.

Same Leg showing the destructive
force of the bullet.

WOOD ISLAND, ALASKA.

Jan. 17, 1899

SAVAGE ARMS CO., UTICA, N. Y.:

Gentlemen: Last fall while on a hunting expedition I had the pleasure of killing two bull moose with one of your .303 caliber Savage Rifles. The first one I killed on the 26th day of September, 1896. I discovered him swimming across a lake and after a very exciting chase succeeded in getting a shot. He got where half a mile away from us and, at a certain point. When we reached the point a few minutes after he had gone in behind it, we discovered him standing on the bank not to exceed sixty yards from the boat. I shot at him. He at once jumped and ran towards the woods, which were about one hundred feet distant. Just as he was about to enter them he fell dead, and when we got to him he had breathed his last. He was shot behind the forward shoulder, the bullet tearing the arteries away from the heart, tearing his lungs and lodged on the other side, just under the skin, where it could be easily felt. The ball had passed through the ribs and had become flattened out about the size of a twenty five cent piece. We could not find a drop of blood between the spot where he stood when I shot

and where he fell. When we dressed him, however, we found him to be simply a mass of blood inside. This animal was estimated by the guides to weigh 1000 pounds.

The second one I killed on the 26th day of September, 1896. My guides, who were getting breakfast, discovered him standing across a little bay from our camp, leisurely feeding at the edge of the water. They called me out of my tent and pointed the old fellow out. I went back, got my rifle, and told my wife, who was with me on this trip, what I had seen. After we had all viewed this fine specimen for about five minutes, he turned round broadside and I aimed just over the ridge of his back. I hurriedly estimated the distance to be between three and four hundred yards, and we afterwards found it to be 280. When I shot he

jumped and plunged into the woods. After tracing him about half a mile and finding very little blood, we found him dead. The bullet had entered six inches above and three inches back of the heart, and passed out on the other side, making a smaller hole where it passed out than where it entered. It had, however, shed the metal jacket. The lungs were badly torn to pieces, an internal



Heads of the two moose shot Sept. 26th and 28th, 1896, by Andrew S. White. Each killed with a single shot from a .303 Savage Rifle. See letter above.

BROOKLYN, N. Y., Oct. 31, 1899.

MR. ARTHUR SAVAGE, GEN. MGR. SAVAGE ARMS CO., UTICA, N. Y.

Dear Sir:—I have just returned from my hunting trip with one bull moose and two bull caribou, all killed at one dead in their tracks, with only four or five minutes in each. I shot the moose at a distance of 50 yards without a variation from the 200 yards fixed sight across the lake, and in three seconds I hit but he fell a little more than turned and more. There were three bulls following me, and I hit my pick. I tried to take for insurance, and about half past five I shot five shots in a space less than two inches in diameter. Three of the shots could have been covered with a silver dime. All five shots were belted with remarkable rapidity and without ascertaining whether or not they were hitting the target. My guide was so much pleased with the rifle that he is going to sell it to him at the full price, but I could not be induced to part with it for any money.

I fired one bull caribou on a lake at an estimated distance of 100 yards, without missing the sight, merely hitting it a little over his back and wounding it in one leg, as the pool of blood in a track made by a fore foot showed. That was the best and only thing that ever got away from me after firing at him with my Savage, and I have killed deer, moose and caribou without net to mention rutted grouse, partridges, etc.

Yours truly,

NOAH PALMER

SAVAGE ARMS COMPANY, UTICA, N. Y.

Gentlemen—I purchased a Savage rifle last fall and am more than pleased with it. I have used all the popular makes of guns but will say that the gun with which I am acquainted possesses the killing and stopping power of the Savage. It certainly is the most "savage" gun I ever saw. One deer shot in the second joint of the spinal column had his head literally shot off. Another shot in the neck without striking any bones, head to death hanging 100 yards. A goose shot in the body with a soft-point bullet had his legs actually torn off. This goose was killed at 125 yards measured, with an exceedingly fine sight, thereby showing the flat trajectory of the ball.

Another deer was shot in the neck above the heart with as fine a sight as I could make, at a distance of about 100 yards. I take pleasure in recommending your guns to hunters who desire a gun that will kill instantly and not allow game to escape, suffer for days and die of wounds and be entirely lost.

I will state that this is written without solicitation, as I am sure you never heard of me before.

Yours respectfully,

Lo Lo, Mont.

GEORGE C. RICE.

CANON CITY, COLOR., March 30, 1900

SAVAGE ARMS CO., UTICA, N. Y.

Gentlemen—Your Savage rifle made to my special order reached me yesterday by express, and my office has been crowded all day by sportsmen and hunters. When some of the obliging ones took an interest to see the end of the barrel they would shake their heads, but the record I made last year with one of your rifles in Alaska, I think caused them to say nothing about its being too small or light. I told you that it was light. And the fine Italian walnut and the splendid finish you gave it was an excellence. I am glad I have the best possible Savage carried out at your works. This adds greatly to the appearance of the gun.

The improvements that you have made in your 1899 model are valuable, and I think you will have one of the best all round guns on the market. Several of my friends here want a gun, and I will secure you four or five orders soon.

Yours very truly,

DALL DE WEESE.

Savage Military Rifle.



The military rifle has the same action as the sporting rifle, but it is fitted with the usual military fore-stock, bands and bayonet. The butt plate and sights are also of a military design, while the barrel is twenty eight inches in length. This rifle embodies the following essential points of excellence, viz. — Safety, certainty of action, ease of manipulation, simplicity arising from few parts, less conditions required to load and operate the mechanism than any other magazine rifle, and great durability. The breech bolt is in one piece, strongly supported at both ends, the recoil is taken up directly in the rear and not at the side of the chamber. There are no projecting knobs, hammer or bolt handles to become entangled in straps and clothing, the rifle has a remarkably clear, smooth appearance, free from all protuberances.

The firing mechanism can not be operated until the rifle is safely breeched up and locked, the firing pin is cammed back from the face of the breech bolt in the first movement of the lever in unbreeching the rifle. Double loading or jamming of cartridges is impossible, shells are positively ejected, however slowly the mechanism is operated.

In loading, either as a single loader or magazine rifle, it is only necessary that the cartridges be placed down in the breech opening heads to the rear. The act of placing the cartridge in the breech opening presses the automatic cut-off into its recess thereby "cutting off" the cartridges in the magazine below. This automatic arrangement eliminates the necessity for a "cut off" operated by the soldier, thus reducing the conditions for reserving the magazine cartridges.

If a soldier fails to place a cartridge in the breech opening, a cartridge will be fed up automatically from the magazine. The rifle can be alternately and automatically used as a single loading and as a magazine rifle.

The extracting of empty shells is positive with the multiplied extracting power of over twelve to one, each empty shell is fully ejected from the rifle to the right before another cartridge can be loaded or fed up from the magazine.

A numerical indicator exposed through an opening in the frame always shows the number of cartridges contained in the magazine and also shows when the magazine is empty. Two short movements only are required to extract and eject the fired shell, load, breech up and cock the firing mechanism, ready to fire. No special tools are required to dismount and assemble the action. The working mechanism is exposed to view by removing the butt-stock. Dangerous pressures from compressed powders are avoided by holding all the magazine cartridges by their rims in a rotary sprocket, thus preventing the bullets from being pressed too far into the shells from the action of recoil.

Magazine cartridges can be safely removed from the rifle without cocking the firing mechanism. Cartridges are loaded into the magazine through the direct opening thereby obviating any necessity for hinged trap doors, sliders or any coverings. Dangers arising from the use of high explosive powders in shells having defective heads or primers are wholly overcome by providing a solid steel breeching shoulder between the eyes and head of the operator and the chamber making it impossible for the powder gas to escape to the rear.

The highly popular and reliable lever action is used in the Savage rifle. It enables the soldier to operate from the shoulder or aiming position, this action also permits of using the rifle in any position, either standing, sitting or lying prone. At Creedmore the Savage rifle was placed in the hands of soldiers of the New York State guard who operated the rifle while lying prone, in competition with bolt-action rifles, fully demonstrating the practicability of the Savage lever system for this position. A soldier can work a Savage rifle closer to the ground than he can under the same conditions a bolt-action rifle.

The lever guard on the Savage rifle and carbine makes it safe and reliable for the use of cavalry. It is impossible for bridle reins or straps to become entangled with the trigger and thereby occasion accidents.

The action of the lever is short and requires little power to operate, the arm being very quick and handy. The point blank military range is up to 600 yards.

On large contracts the Savage Military rifle can be manufactured to take any military cartridge.

The Savage Military rifle since it has been perfected, has won every contest in which it has competed.

In the matter of selection of improved firearms for the National Guard of the State of New York, the Savage rifle was recommended by the Commission appointed by Governor Morton, who, however, argued economy as his reason for not making any change from the old black powder Springfield rifles. The late war with Spain has once for all demonstrated the folly of using single-shot black powder rifles in modern warfare against smokeless powder magazine rifles.

Extract of George Kennan's Story of the War—The Outlook, August, 1898.

Among the volunteer regiments that were hotly engaged and lost heavily in Friday's battle were the Seventy-first New York and the Second Massachusetts. Both were armed with Springfield rifles, and this put them at a great disadvantage as compared with the regulars, all of whom used Krag-Jorgensen rifles or carbines with smokeless powder. In a wooded and chaparral-covered country like that around Santiago, where it is so easy to find concealment and so difficult to see troops at a distance, the use of smokeless powder is of the utmost possible importance. A body of men may be perfectly hidden in woods or chaparral within five hundred yards of the enemy's outposts, and if they use smokeless powder they may fire from there for half an hour without being seen or getting a return shot; but if they are armed with Springfields, the smoke from their very first volley reveals to the enemy their exact position, and the chaparral that conceals them is torn to pieces by a hail storm of projectiles from Mausers and machine guns. It is quite unreasonable to ask men to go into action in a field like this with rifles that can be used only with civilized powder. You might as well require our men to hoist above the bushes and chaparral a big flag emblazoned with the words "Here we are!" Dr. Hitchcock, surgeon of the Second Massachusetts, told me that again and again when they were lying concealed in dense scrub beside a regiment of regulars, the latter would live for twenty minutes without attracting a single return shot from the enemy's line—but the moment the men of the Second Massachusetts began to use their Springfields, and the smoke began to rise above the bushes, the Spaniards would concentrate their fire upon the spot, and kill or wound a dozen men in as many minutes. It is to be hoped that New York and Massachusetts will not send any more men to Cuba with these antiquated guns. They were good enough in their day, but they are peculiarly unsuited to the conditions of warfare in this field.

GEORGE KENNAN, Santiago de Cuba.

Report of the New York State Board of Examiners to select Improved Arms for the National Guard.

• • • • • The Savage magazine rifle, lever action, magazine holding five cartridges, in strength and firmness of parts, very close compliance with the eleven "salient points" mentioned in the instructions for the consideration of the Board by the Adjutant General, ease of manipulation, and general all round excellence, won the unanimous decision of the Board of Examiners as being clearly the best military magazine rifle submitted for their examination.

FOREIGN BOLT MILITARY MAGAZINE RIFLES.

We have also very critically examined a number of military magazine rifles in use in the army in this country and in Europe of foreign invention, and are free to say that in our opinion, all points carefully considered, the Savage magazine rifle herein recommended is far superior in simplicity of construction, safety, durability, effectiveness, accuracy, beauty of outline, ease and certainty of manipulation, and for the double and ready use as a single loader or as a magazine gun, to any foreign magazine arm we have inspected.

We feel confident that with the Savage magazine rifle placed in the hands of the National Guard of the State of New York a new life will be imparted to the art of target practice, great pride in the accuracy and beauty of the arm developed, and the very best weapon in the world for military purposes secured for their use.

We therefore unanimously recommend that the Savage military magazine rifle be adopted for the use of our National Guard under the authority of Chapter 606 of the Laws of 1895.

Respectfully submitted,

ALBERT D. SHAW, *Chairman.*

E. W. BLISS,

ROBERT H. THURSTON, *Commissioners.*

Extract from the Mexican Board of Army Officers selected by President Diaz for testing the Savage Military Rifle.

(Translation.)

Mexico, June 19, 1897.

The SAVAGE rifle is remarkable for its magazine, which is charged with one cartridge at a time until five have been loaded and one also in the barrel chamber, which can be reloaded whenever necessary without interfering with those in the magazine, for which reason this weapon may be called one of voluntary repetition.

In view of the number of shots made with the rifle without same being blocked in its mechanism or injured or broken in any way (the number of shots fired was about nine hundred), it may be said to have the necessary strength and solidity, and on examination of the various parts of the weapon, it was found that these possessed as far as possible the necessary resisting powers.

The powder experiments proved very satisfactory, the weapon resisting the charge, which was an excessive one perfectly well. The rimmed cartridge used by the Savage rifle is advantageous as compared with those made with a grooved head used by other weapons, on account of the greater security they offer for the purpose of extraction and their greater resistance.

Mexico, June 19, 1897.

(Signed)

LIEUT. COL. A. IBERRI,

LIEUT. COL. GILBERTO LUNA,

GENERAL I. SALAMANCA, *President.*

Telegraphic and Cable Code.

Cable Address:—"SAVAGE, UTICA."

SPORTING RIFLES.

	BOUND.	OCT.	HALF OCT.
.303 cal., 26-inch barrel,	Abate.	Bait.	Cub.
.303 cal., 26-inch barrel, shotgun butt plate,	Abit.	Bill.	Can.
.303 cal., 22-inch barrel, shotgun butt plate,	Aback.	—	—
.303 cal., 28-inch barrel,	Abed.	Bale.	Cat.
.303 cal., 30-inch barrel,	Abode.	Barb.	Cake.

MILITARY RIFLES.

.303 cal., 28-inch barrel,	.	.	Dace.
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CARBINES.

.303 cal., 20-inch barrel,	.	.	Fig.
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CARTRIDGES.

.303 cal. Savage Smokeless Powder Cartridges,	Kail.
.303 cal. Savage Smokeless Powder Expanding Bullet Cartridges,	Kedge.
.303 cal. Savage Smokeless Powder Miniature Bullet Cartridges,	Keep.
.303 cal. Savage Paper-patched Bullet Cartridges,	Kin.
.303 cal. Savage Smokeless Powder Miniature Metal-Covered Bullet Cartridges,	Kiss.
.30 cal. U. S. Government Smokeless Powder Cartridges,	Kernel.

SHELLS.

.303 cal. Savage Regular Shells,	Label.
.303 cal. Savage Miniature Shells,	Lace.
.30 cal. U. S. Government Shells,	Lackey.

BULLETS.

.303 cal. Savage Metal-Covered Bullet, .	. Make.
.503 cal. Savage Miniature Bullet, .	. Malar.
.303 cal. Savage Expanding Bullet,	Man.
.503 cal. Savage Paper-Patched Bullet, .	. Master.
.303 cal. Savage Metal-Covered Miniature Bullet,	Mat.
.50 cal. U. S. Government Metal Covered Bullet,	Manago.

PRIMERS.

Savage Primers (No. 8½), .	. Net.
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POWDER.

Savage Regular Smokeless Powder, No. 1,	. Pacha
Savage Miniature Powder, No. 2, .	. Pad.

SAVAGE IDEAL RELOADING IMPLEMENTS.

.303 cal. Savage Cartridge No. 3, .	. Raw.
.303 cal. Savage Cartridge No. 6, .	. Red.

QUANTITY.

Use simple numbers up to 20.

25, .	. Sin.
50, .	. Sax.
100, .	. Shop.
500, .	. Shove.
1,000, .	. Sil.
2,000, .	. Satan.
5,000, .	. Store.
10,000, .	. Offal.
20,000, .	. Stay.
50,000, .	. Strap.
100,000, .	. Stone.



Mr. Arthur Savage, the inventor, firing the Savage Magazine Rifle as a single loader with the following parts of the mechanism taken out:

- | | | |
|----------------------------|------------------------------|-----------------------------|
| 1, Magazine Carrier, | 6, Automatic Cut-off Spring, | 10, Trigger Spring Screw, |
| 2, Magazine Spindle, | 7, Retractor, | 11, Bolt Stop, |
| 3, Magazine Spring, | 8, Retractor Screw, | 12, Bolt Stop Screw, |
| 4, Magazine Spindle Screw, | 9, Trigger Spring, | 13, Trigger and Lever Lock. |
| 5, Automatic Cut-off, | | |

The above parts constitute nearly one-half the mechanism.

The recoil is so slight that the rifle can be fired without the support of the fore and butt stocks.

